

Abstract of Disclosure

Systems and methods for opportunistically charging a rechargeable power source of a portable electronic unit are provided. The system includes a primary inductance assembly energized by a main power source for inducing an electro-magnetic flux in a secondary coil assembly associated with a power source of the portable unit. Such electro-magnetic flux creates an electric current that is subsequently employed for charging the power source of the portable unit. A controller of the charging system can monitor state of charge, and notify a user when a recharge is required. Scavenging modes may also be employed for recharging the main power source and the rechargeable source of the portable unit.